

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A closed loop continuous emulsion polymerisation apparatus comprising
 - a circulation pump having an inlet and an outlet,
 - ~~at least one monomer feed and at least one feed for water phase,~~
 - a reactor tube connecting the outlet of the circulation pump with the inlet of the circulation pump, said reactor tube being capable of receiving a cleaning pig and having at least one and which receives the monomer feed and, at least one water phase feed, wherein said monomer and said water phase form a polymer emulsion within the reactor tube and said polymer emulsion is recirculated by the circulation pump and through which the circulation pump recirculates a polymer emulsion along the entire length of the reactor tube, and at least one an outlet for the discharge of overflow of a portion of the polymer emulsion,
 - a by-pass tube which circumvents ~~for by passing a pig around the~~ circulation pump,
 - and a pig receiving station which is in parallel connection with the circulation pump or the reactor tube.

2. **(Currently Amended)** The polymerisation apparatus according to claim 1, wherein the pig receiving station is integrated into the by-pass tube ~~for by passing a pig around the circulation pump.~~

3. **(Currently Amended)** The polymerisation apparatus according to claim 1, wherein the ~~circulation pump has a suction side and a delivery side and the reactor tube has an aperture through which the reactor tube is in fluid communication with the suction~~ inlet side of the circulation pump and continues on to the delivery outlet side of the circulation pump, the part of the reactor tube between the ~~suction-inlet~~ and delivery outlet sides of the circulation pump serving as the pig receiving station.

4. **(Currently Amended)** The polymerisation apparatus according to claim 3, wherein the aperture is a slot extending substantially in the longitudinal direction of the reactor tube.

5. **(Original)** The polymerisation apparatus according to claim 4, wherein the width of the slot is smaller than the width of the pig.
6. **(Original)** The polymerisation apparatus according to claim 5, wherein the width of the slot increases downstream.
7. **(Previously Presented)** The polymerisation apparatus according to claim 1, wherein the reactor tube comprises a means for directing the pig into the pig receiving station.
8. **(Original)** The polymerisation apparatus according to claim 1, wherein at least a substantial part of the reactor tube forms at least one helical coil.
9. **(Previously Presented)** The polymerization apparatus according to claim 1, further comprising a pig detector for checking whether the pig is present in the pig receiving station.
10. **(Withdrawn)** A process for preparing emulsion polymer by means of the polymerisation apparatus according to claim 1.
11. **(Withdrawn)** The process according to claim 9, wherein a pig is launched at intervals ranging from 1 to 60 minutes.
12. **(Withdrawn)** The process according to claim 9, wherein a pig is launched at intervals ranging from 10 to 20 minutes.
13. **(Currently Amended)** A closed loop continuous emulsion polymerisation apparatus comprising
 - a circulation pump having ~~an inlet~~ a suction side and ~~an outlet~~ a delivery side;
 - a reactor tube which connects the ~~outlet~~ delivery side of the circulation pump to the ~~inlet~~ suction side of the circulation pump; wherein the reactor tube has at least one inlet for monomer feed; at least one feed inlet for water phase

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feed; and an outlet for the discharge of a polymer emulsion formed within the reactor tube from the monomer feed and water phase feed;

a pig for cleaning the apparatus wherein the pig is capable of circulating through the reactor tube;

a by-pass tube for ~~by-passing a pig around~~ that circumvents the circulation pump; and

a pig receiving station which is in parallel connection with the circulation pump or the reactor tube and which is releasably engaged to the by-pass tube or the reactor tube such that the pig receiving station ~~may be separated~~ is capable of being disengaged from the apparatus.

14. (Currently Amended) A closed loop continuous emulsion polymerisation apparatus capable of receiving a cleaning pig, said apparatus comprising

a circulation pump having ~~an inlet~~ a suction side and ~~an outlet~~ a delivery side;

a reactor tube which connects the ~~outlet~~ delivery side of the circulation pump to the ~~inlet~~ suction side of the circulation pump; wherein the reactor tube has at least one inlet for monomer feed; at least one feed inlet for water phase feed; and an outlet for the discharge of a polymer emulsion formed within the reactor tube from the monomer feed and water phase feed;

a by-pass tube for ~~by-passing a pig around~~ that circumvents the circulation pump;

a pig receiving station which is in parallel connection with the circulation pump or the reactor tube and which comprises a means for removing the pig from or inserting the pig into the pig receiving station without disruption to the flow of the polymer emulsion.